



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/849,580

05/04/2001

Ryan A. Reeder

8266-0519

9710

7590

06/07/2004

Intellectual Property Group
Bose McKinney & Evans LLP
2700 First Indiana Plaza
135 North Pennsylvania Street
Indianapolis, IN 46204

EXAMINER

LEE, BENJAMIN C

ART UNIT

PAPER NUMBER

2632

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/849,580

Applicant(s)

REEDER ET AL.

Examiner

Benjamin C. Lee

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-101 is/are pending in the application.
- 4a) Of the above claim(s) 16-33, 59-68 and 81-101 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 34-58 and 69-80 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6-8, 11.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2632

DETAILED ACTION

1. Applicant's election without traverse of **claims 1-15, 34-58 and 69-80** in Paper No. 10 is acknowledged.
2. Claims 16-33, 59-68 and 81-101 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 10.

Claim Rejections - 35 USC § 112

3. **Claims 10 and 51** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1) Claim 10 should depend on claim 9 to provide antecedent basis for "the third display" on line 1.

2) Regarding claim 51, the phrase "and the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2632

5. **Claims 39-43, 45 and 49** are rejected under 35 U.S.C. 102(b) as being anticipated by Kelly et al. (WO94/13198).

1) In considering claim 39:

-- Kelly et al. discloses a computer system assigned with a patient or bed upon which the patient rests or with which the patient is associated (Fig. 1A; page 8, line 13 to page 9, line 33), the system comprising: a computer (102 having processing, memory and other computer capabilities); a plurality of devices for sensing various physical conditions and characteristics of the patient (150-158), each device having an output coupled to the computer (Fig. 1A), and a display screen (104) arranged to present information related to the patient (page 13, lines 29-30; page 24, line 7 to page 25, line 34; page 27, line 6 to line 29).

2) In considering claims 40-43, 45 and 49, Kelly et al. met all of the claimed subject matter as in claim 39, including:

a) the claimed input devices for inputting data and instructions concerning the patient (150-158; page 31, lines 16-18);

b) the claimed configured to store and retrieve data concerning the patient and the sensing devices and to display such data over a period of time to show relationships on a time basis (storage 106 and corresponding disclosure; display 104 in Fig. 1A showing a time-based relationship display);

c) the claimed memory in which the patient's history is stored for retrieval and display (106; page 8, lines 5-10; page 17, lines 1-34 and Fig. 7);

d) the claimed heart rate sensors, respiratory rate sensors, and temperature sensors (page 24, lines 10-12 and page 24, lines 8-10 & 30-34);

Art Unit: 2632

e) the claimed communication network providing for remote monitoring of patient data and remote inputting of data and instructions (page 30, line15-29; page 31, lines 12-24 and Fig. 7);

f) the claimed patient status and condition is stored and used for a time-based presentation on the display (Fig. 1A).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 47-48 and 50-58** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly et al.

1) In considering claims 47-48, Kelly et al. met all of the claimed subject matter as in claim 39, except:

--the claimed ultrasound image input and x-ray image input to the computer.

Kelly et al. teaches using EKG, blood pressure, pulse, temperature, EEG, neonatal EKG (158) or other physiological parameter sensors to monitor a patient (page 24, lines 10-11). Since ultrasound and x-ray imaging are known for providing patient physiological condition information, it would have been obvious to one of ordinary skill in the art at the time of the

Art Unit: 2632

claimed invention that they can be included in a patient monitoring system such as taught by Kelly et al. as additional inputs for a more comprehensive monitoring procedure.

2) In considering claim 50:

a) Kelly et al. discloses a system for monitoring patient information, comprising a processor (202) coupled to a memory (106), a user interface coupled to the processor to permit a caregiver to input instructions into the system (page 31, lines 15-18 and Fig. 1A); a display screen (104) coupled to the processor; a power source (166) coupled to the processor; and a connector module (Fig. 1A) configured to couple the system to a medical device including a physiological monitor (150-158), the medical device using the processor, the power supply, and the display of the system to operate the medical device, thereby reducing redundant components in the medical device (Fig. 1A);

except:

b) the claimed medical device using said user interface.

Kelly et al. teaches use of a user interface (keyboard, etc.) connected to the patient monitor (102) through docking station 110 inherently for caretaker to input control for the control of the patient monitor including the medical device, whereby the patient monitor is connected to medical device (150-158), without specifying whether such user interface control controls the medical device directly, or simply controls the processing of the signals from the medical device on the patient monitor. However, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that user interface control in a system such as taught by Kelly et al. can be implemented with direct medical device control so as to allow

Art Unit: 2632

on/off, calibration and other control of the medical device by a user for improved level of control and thus the usefulness of the system.

3) In considering claims 51-52, Kelly et al. made obvious all of the claimed subject matter as in claim 50, including:

--the claimed vital signs monitor (150-158); wherein the user interface includes a voice recognition user interface (page 31, line 17).

4) In considering claim 53, Kelly et al. made obvious all of the claimed subject matter as in claim 50, except:

--the claimed wherein the user interface is a graphical user interface.

However, since Kelly et al. teaches user interface that can include a voice recognition user interface and keyboard (page 31, lines 15- 17), it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that various user interface known in the art, such as a graphical user interface, can be used based on user preference.

5) In considering claim 54, Kelly et al. made obvious all of the claimed subject matter as in claim 50, including:

--the claimed plurality of medical devices (150-158) coupled to the computer system; the computer monitoring output signals from them on a real time basis to provide a time-based presentation of patient information on the display screen (Fig. 1A).

6) In considering claims 55-56, Kelly et al. made obvious all of the claimed subject matter as in the consideration of claims 50 and 43.

7) In considering claims 57-58, Kelly et al. made obvious all of the claimed subject matter as in claim 55, including:

--the claimed at least four or five indicators are displayed (page 24, lines 10-11; page 25, lines 8-34 and Fig. 1A).

8. **Claims 1-6, 9, 15, 44 and 46** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly et al. in view of David et al. (US pat. #5,544,649).

1) In considering claim 1:

a) Kelly et al. discloses a patient monitoring system comprising: a computer (102 having processing, memory and other computer capabilities); an input device (150-158) coupled to the computer and configured to input patient information; a display screen (104) coupled to the computer for displaying patient information (page 13, lines 29-30; page 24, line 7 to page 25, line 34; page 27, line 6 to line 29);

except:

b) the claimed first and second display screens coupled to the computer for displaying a first portion of the patient information on the first display screen and a second portion of the patient information on the second display screen.

In the same art of patient physiological or vital signs monitoring display, David et al. teaches the use of separate display screens so that separate patient monitored parameters can be simultaneously displayed for simultaneous perception (Fig. 5 and col. 13, lines 44-54).

Since the system of Kelly et al. monitors and displays a plurality of patient parameters (e.g. EKG, blood pressure, pulse, temperature, EEG, oximetric data, respiration waveforms and other physiological parameters according to page 24, lines 7-11 and page 25, lines 5-31), in view of the teachings of Kelly et al. and David et al., it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to use at a plurality of display screens for the

Art Unit: 2632

plurality of portions of patient information such as taught by David et al. in a multiple-patient-parameter display system such as taught by Kelly et al. so that at least some (e.g. first and second) portions of the patient information can be displayed on respective (e.g. first and second) plurality of display screens for simultaneous display for better perception and comprehension by the user.

2) In considering claim 2, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 1, wherein:

The display of the system of Kelly et al. and David et al. displays patient vital signals over time (104 of Kelly et al. and 78 & 80 of David et al.), while David et al. also teaches monitoring and displaying patient vital signs at predetermined times over a predetermined period of time (col. 8, lines 52-67). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to monitor and display patient vital signs taken at predetermined times over predetermined period of time in a system such as taught by Kelly et al. and David et al. to prevent information overload for the system as well as the user. Furthermore, since convention vital sign and other patient information are presented in the form of a patient chart, such patient information can be displayed on a patient chart to conform to the preference of a variety of users who are generally familiar with patient charts to facilitate user friendliness.

3) In considering claim 3, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 1, including:

--the claimed wherein the input device includes a physiological monitor (150-158 of Kelly et al.) or wireless data receiver (page 6, lines 24-28 of Kelly et al.; Fig. 7 of David et al.)

4) In considering claim 4, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 3, including:

--the claimed wherein the physiological monitor includes a heart rate monitor, a temperature sensor, a blood oxygen level monitor or an EKG monitor (page 24, lines 10-11; page 25, 8-10 and 18-31 of Kelly et al.; display parameters on displays 78, 82 & 154 that include cardiac activity, oximetric data and ECG data of David et al.)

5) In considering claim 5, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 3, including:

--the claimed manual input device in the form of a keyboard, voice recognition input device, or a barcode reader (page 31, lines 14-17 of Kelly et al.)

6) In considering claim 6, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 1, including:

--the claimed physiological monitor coupled to the computer to provide a real time data input for storing and displaying (page 25, line 8 of Kelly et al.)

7) In considering claim 9, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 1, including:

--the claimed third display coupled to the computer for display of the patient information (3 displays 78, 82 and 154 of David et al.)

8) In considering claim 15, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 1, including:

-- the claimed said computer is coupled to a communication network to transmit and receive patient information to/from a remote location (page 30, lines 21-30 and page 31, lines 11-24 of Kelly et al.)

9) In considering claim 44, Kelly et al. met all of the claimed subject matter as in claim 39, except:

--the claimed means for inputting fluid, electrolyte and nutrition data into the memory on a time basis.

In the same patient monitoring art, David et al. teaches the monitoring of patient fluid and food intakes (col. 20, lines 47-51) in addition to monitoring patient physiological conditions (Fig. 5). In view of the teachings by Kelly et al. and David et al., it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the monitoring and storage of patient physiological conditions in a system such as taught by Kelly et al. can be complemented by fluid and food intake such as taught by David et al., such as fluid, electrolyte and nutrition data as specific examples of fluid and food intake, to provide a more comprehensive monitoring of the patient.

10) In considering claim 46, Kelly et al. met all of the claimed subject matter as in claim 39, except:

--the claimed video imaging input to the computer to provide images of the patient.

In the same patient monitoring art, David et al. teaches the monitoring of patient using video imaging input in addition to monitoring patient physiological conditions (Fig. 5). In view of the teachings by Kelly et al. and David et al., it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the monitoring of patient conditions in a

Art Unit: 2632

system such as taught by Kelly et al. can be complemented video imaging such as taught by David et al. to provide a more comprehensive monitoring of the patient.

9. **Claims 69-80** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly et al. in view of David et al. and Phillips et al. (US pat. #5,857,685).

1) In considering claims 69-80, Kelly et al. and Davis et al. made obvious all of the claimed subject matter as in the consideration of claims 1-6, including:

a) battery (166 of Kelly et al.) coupled to computer (102 of Kelly et al.);

While Kelly et al further teaches that the computer (102) is portable and detachably coupled to docking station (110) which provides power to recharge battery 166 (page 9, lines 33-35), and that the docking station (110) may be positioned on an intravenous pole (page 9, lines 11-15), Phillips et al. teaches an intravenous pole support that can be in the form of a walker having a base with casters and a support coupled to the base, and a handle coupled to the support, with multiple IV poles for supporting multiple IV units (Figs. 12) and having electrical power supply (col. 3, lines 47-50).

In view of the teachings by Kelly et al., David et al. and Phillips et al., it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the docking station and portable computer patient monitoring apparatus such as taught by Kelly et al. and David et al. can be amounted to an IV pole support structure in the form of a walker with integrated IV poles such as taught by Phillips et al. as a specific implementation using a movable arm having a first end coupled to the walker and a second end coupled to the display to allow position adjustment of the display without unexpected result. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to provide

Art Unit: 2632

electrical isolation between the respective power supplies of the monitor and the walker using a well known isolation transformer to prevent shock and equipment damage.

10. **Claims 7-8 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly et al. in view of David et al. and Helot (US pat. #6,309,230).

1) In considering claims 7-8, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 1, except:

--the claimed said first and second displays are coupled to a base, and wherein the second display, the input device, and the computer are removable from the base as a separate module for transport with the patient.

Kelly et al. teaches that the portable monitor (102) having input devices (150-158) and display (104) is electrically and mechanically coupled to base (docking station 110), whereby the base is further electrically coupled to another bedside display (120, 122) which may be a slave display or a full function display (page 10, lines 4-11), and that the portable monitor (102) is detachable from the base as a separate module for transport with the patient (page 9, lines 11-31).

Helot teaches a known docking station or base that allows detachable connection of a plurality of computers having respective displays that allow data interchange and synchronization (12, 14 of Fig. 1 and Abstract).

In view of the teachings by Kelly et al., David et al. and Helot, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that a known docking station such as taught by Helot can be used in place of the docking station in a system such as taught by Kelly et al. and David et al. to allow either the bedside display to be both electrically and mechanically coupled to the docking station to form a single modular piece of

Art Unit: 2632

equipment to save space around the patient, or to allow the use of plural modular/detachable display devices at the portable monitor, as ways to implement the simultaneous display of first and second portions of patient information as taught by Davis et al. while allowing selective portability for transport with the patient by the user.

2) In considering claim 10, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 9, plus the consideration of claim 8 further in view of Helot (see also col. 2, lines 41-45 of Helot for more than two computer devices with displays and inputs).

11. **Claims 11-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly et al. in view of David et al. and Kikinis (US pat. #5,841,424).

1) In considering claims 11-12 and 14, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 1, except:

--specifying the claimed said first display screen is larger than the second display screen, wherein the first and second displays are coupled to a base so that a top edge of the first and second displays are aligned with each other, wherein the smaller second display, the input device, and the computer are removable from the first larger display screen as a separate module for transport with the patient.

However, David et al. shows the use of a first display screen (80 or 82 of Fig. 4) that is larger than a second display screen (78 of Fig. 4) in the display of respective patient vital signs parameters, while Kelly et al. teaches the coupling of the portable computer (102) having input devices to a docking station (110) so that the portable computer can be removed from the docking station and transported with the patient (page 9, lines 12-31), and Kikinis teaches a known docking station that can accommodate multiple diverse computing devices each having

Art Unit: 2632

respective displays (Abstract; Figs. 1 & 4). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention that multiple displays for displaying plural patient vital sign parameters in a system such as taught by Kelly et al. and David et al. can be implemented by insertion or including of a first larger display screen and the modular portable computer (includes input device, computer and smaller second display) both coupled to a docking station (base) of a known configuration such as taught by Kikinis to allow simultaneous display of the plural parameters as taught by David et al. while still allowing the modular removal of the portable monitor for transport with the patient as taught by Kelly et al. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the dimension of the first and second displays in a system such as taught by Kelly et al., David et al. and Kikini can be designed so that their top edges are aligned with each other when coupled to the base (docking station) as a way to present an aesthetic appearance as a user preference.

2) In considering claim 13, Kelly et al., David et al and Kikini made obvious all of the claimed subject matter as in claim 12, except:

--specifying the claimed wherein a portion of the larger first display screen adjacent a bottom edge of the first display screen provides a region for at least one of a menu display area, a pen-based input device, and a touch screen input device.

However, Since Kelly et al. teaches the display of a plurality of patient information and the use of input devices including keyboards, pointing devices, and voice input for interacting with the system (page 31, lines 16-17) while David et al. teaches the use of keyboard 76 for interacting with the system (Fig. 5) and Kikini teaches the use of input devices (inherent on PDA

Art Unit: 2632

37) located proximate a bottom edge of the display screen for the same purpose, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that various known input devices, including at least one of a menu display area, a pen-based input device, and a touch screen input device, can be implemented at the main display screen such as the first display screen at its bottom edge region as alternative or auxiliary input devices in a system such as taught by Kelly et al., David et al and Kikini without unexpected results.

12. **Claims 11-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly et al. in view of David et al. and Wilk (US pat. #6,643,124).

1) In considering claims 11-12, Kelly et al. and David et al. made obvious all of the claimed subject matter as in claim 1, except:

--the claimed said first display screen is larger than the second display screen, wherein the first and second displays are coupled to a base so that a top edge of the first and second displays are aligned with each other.

However, Wilk teaches a known foldable multiple display configuration suitable for patient vital signs display (col. 9, lines 56-61) with a first display screen (74) that is larger than a second display screen (64, 66), wherein the first and second displays are coupled to a base so that a top edge of the first and second displays are aligned with each other (Fig. 3). In view of the teachings y Kelly et al., David et al. and Wilk, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that a known foldable multiple display configuration such as taught by Wilk can be used to implement the portable multiple displays of system such as taught by Kelly et al. and David et al. to enable compact storage and portable procedures.

2) In considering claim 13, Kelly et al., David et al and Wilk made obvious all of the claimed subject matter as in claim 12, except:

--specifying the claimed wherein a portion of the larger first display screen adjacent a bottom edge of the first display screen provides a region for at least one of a menu display area, a pen-based input device, and a touch screen input device.

However, Since Kelly et al. teaches the display of a plurality of patient information and the use of input devices including keyboards, pointing devices, and voice input for interacting with the system (page 31, lines 16-17) while David et al. teaches the use of keyboard 76 for interacting with the system (Fig. 5) and Wilk teaches the use of keyboard 58 and trackball 60 located proximate a bottom edge of the first display screen for the same purpose, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that various known input devices, including at least one of a menu display area, a pen-based input device, and a touch screen input device, can be implemented at the main display screen such as the first display screen at its bottom edge region as alternative or auxiliary input devices in a system such as taught by Kelly et al., David et al and Wilk without unexpected results.

13. **Claims 34-38** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagy (US pat. #5,291,894).

1) In considering claim 34, Nagy disclosed:

a) the claimed system comprising: means for monitoring at least one physiological condition (6, 8, 10, 12) of a patient on a real time basis (col. 3, lines 5-56); means for recording information related to a treatment of a patient and the time that the treatment was given to the patient (col. 4, lines 30-42); and means for determining an effectiveness indicator of the

Art Unit: 2632

treatment of the patient by further monitoring the physiological conditions on a real time basis after the treatment (col. 1, lines 46-48; col. 3, line 67 to col. 4, line 7; col. 4, lines 13-18 and 42-45);

except:

b) specifying the claimed means for determining the effectiveness of treatment .

Since Nagy teaches using a microprocessor to measure the difference or “change” in the patient’s physiological conditions by comparison the parameters before and after treatment, and that the medical attendant can determine the effectiveness of treatment based on these “measured change”, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that such measured difference/change constitutes a treatment effectiveness indicator in a system such as taught by Nagy. Furthermore, since the criteria for defining effectiveness, the measured differences, and the use of microprocessor have already been taught by Nagy, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to translate the treatment effectiveness indicator into a treatment effectiveness measurement by the microprocessor such that the result constitutes a means for determining treatment effectiveness, so that the medical attendant can observe the effectiveness result without having to infer the effectiveness from the measured difference to save time for the attendant and reduce likelihood of human error.

2) In considering claim 35, Nagy made obvious all of the claimed subject matter as in claim 34, including:

--the claimed therapy device treatment (col. 1, line 19).

3) In considering claim 36, Nagy made obvious all of the claimed subject matter as in claim 34, including:

a) the claimed vibration treatment therapy (col. 1 line 12);

except:

b) specifying that the therapy is performed by a patient support surface.

However, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that a vibratory therapeutic treatment such as taught by Nagy can be implemented on a patient support surface such as a bed, chair or other support known in the art without unexpected results, depending on the body part(s) being treated.

4) In considering claim 37, Nagy made obvious all of the claimed subject matter as in claim 34, including:

--the claimed said treatment is a therapy device performing therapy on the patient (col. 1, line 19), the system including a computer for monitoring the amount of time that the therapy is performed (see Figure and col. 3, lines 6-8).

5) In considering claim 38, Nagy made obvious all of the claimed subject matter as in claim 34, including:

--the claimed computer coupled to a display screen for displaying physiological conditions of the patient on a real time basis and also displaying the times that the treatments occur on the display screen so that a caregiver can monitor the effectiveness of the treatments (see Figure; col. 3, lines 29-38 and col. 4, lines 30-31).

Conclusion

Art Unit: 2632

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Petersen et al., US pat. #6,616,606

--A similar patient monitoring system with portable monitor for attachment to bed, wheelchair or other support structure (col. 13, lines 26-32 and Fig. 6).

2) Adrezin et al., US pat. #5,511,571

--A similar mounting of a device on a walker (Fig. 7).

3) Metz et al., US pat. #6,585,206

--A similar medical accessory support.

4) Pryor, US pat. #4,332,378; Fillon, Jr., US pat. #6,056,249

--Similar walkers with IV unit supports and casters.


15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin C. Lee whose telephone number is (703) 306-4223.

The examiner can normally be reached on Mon -Fri 11:00Am-7:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (703) 308-6730. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2632

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Benjamin C. Lee
Primary Examiner
Art Unit 2632

B.L.
5/30/04